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=> d his

     (FILE 'HOME' ENTERED AT 11:50:04 ON 19 AUG 2004)

     FILE 'CAPLUS' ENTERED AT 11:50:15 ON 19 AUG 2004
L1             STRUCTURE UPLOADED
               S L1

     FILE 'REGISTRY' ENTERED AT 11:50:44 ON 19 AUG 2004
L2          13 S L1

     FILE 'CAPLUS' ENTERED AT 11:50:45 ON 19 AUG 2004
L3          12 S L2

     FILE 'STNGUIDE' ENTERED AT 11:52:47 ON 19 AUG 2004

     FILE 'CAPLUS' ENTERED AT 11:55:21 ON 19 AUG 2004

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.46      63.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -8.82

FILE 'CAPLUS' ENTERED AT 11:55:38 ON 19 AUG 2004
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FILE COVERS 1907 - 19 Aug 2004  VOL 141 ISS 8
FILE LAST UPDATED: 18 Aug 2004  (20040818/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


=> s l1 full
   REGIstRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




FULL SEARCH INITIATED 11:55:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -  27503 TO ITERATE

100.0% PROCESSED   27503 ITERATIONS                          543 ANSWERS
SEARCH TIME: 00.00.01

L4          543 SEA SSS FUL L1
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L5          134 L4

=> s l5 and (halo? fluor?)
        354051 HALO?
       1023157 FLUOR?
          1332 HALO? FLUOR?
                 (HALO?(W)FLUOR?)
L6            0 L5 AND (HALO? FLUOR?)

=> s l5 and (halogen)
        100468 HALOGEN
L7            4 L5 AND (HALOGEN)

=> d 1-4 ibib abs hitstr

L7   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2003:870678  CAPLUS
DOCUMENT NUMBER:          139:371613
TITLE:                    Light-emitting compositions containing calixarenes or
                          calixresorcinarenes suitable for preparation of
                          electroluminescent devices
INVENTOR(S):              Takahashi, Naoto; Hyakuta, Junji; Kawabata, Yuichiro
PATENT ASSIGNEE(S):       Tokuyama Corp., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 38 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
     JP 2003313546         A2    20031106    JP 2002-122730           20020424
PRIORITY APPLN. INFO.:                       JP 2002-122730           20020424
OTHER SOURCE(S):          MARPAT 139:371613
GI
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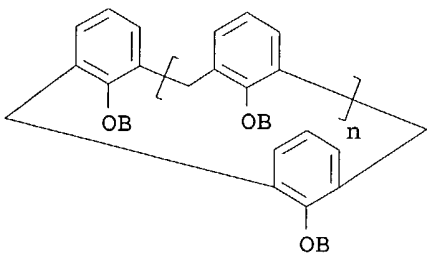

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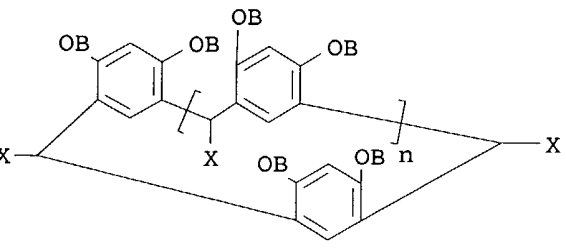


II

AB The compns. contain 0.1-90 weight% calixarenes or calixresorcinarenes having light-emitting organic groups or charge-transferring organic groups and 10-99.9 weight% vinylcarbazole. The preferable structures for calixarenes or calixresorcinarenes are A substituted on each benzene ring of I or II (A,

. B, X = H, **halogen**, alkyl, aryl, alkoxy with ≥1 of A, B, and X being YmZ; Y = bivalent organic group; Z = light-emitting organic group, charge-transferring organic group; m = 0, 1; n = integer of 1-18).

IT **546632-74-0P**

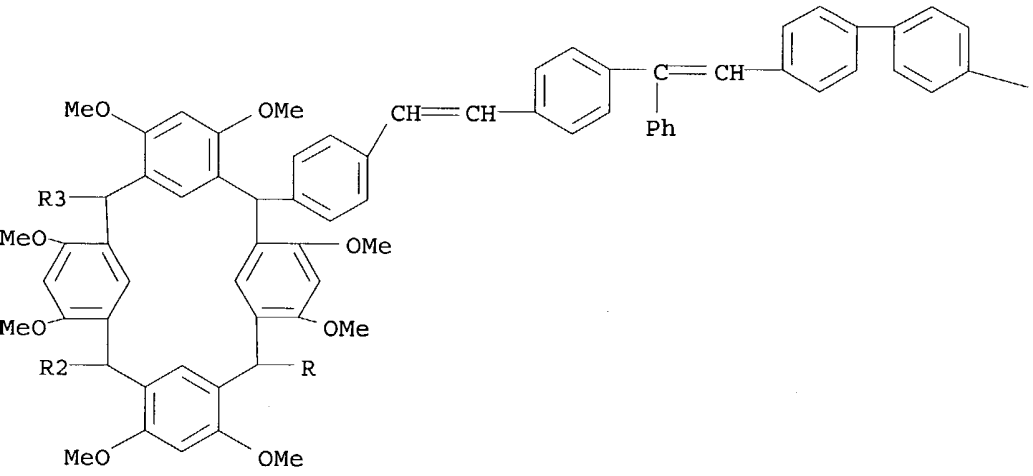
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(light-emitting calixarene or calixresorcinarene compns. for electroluminescent devices)

RN 546632-74-0 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene, 2,8,14,20-tetrakis[4-[2-[4-[2-[4'-(2,2-diphenylethenyl)[1,1'-biphenyl]-4-yl]-1-phenylethenyl]phenyl]ethenyl]phenyl]-4,6,10,12,16,18,22,24-octamethoxy- (9CI) (CA INDEX NAME)

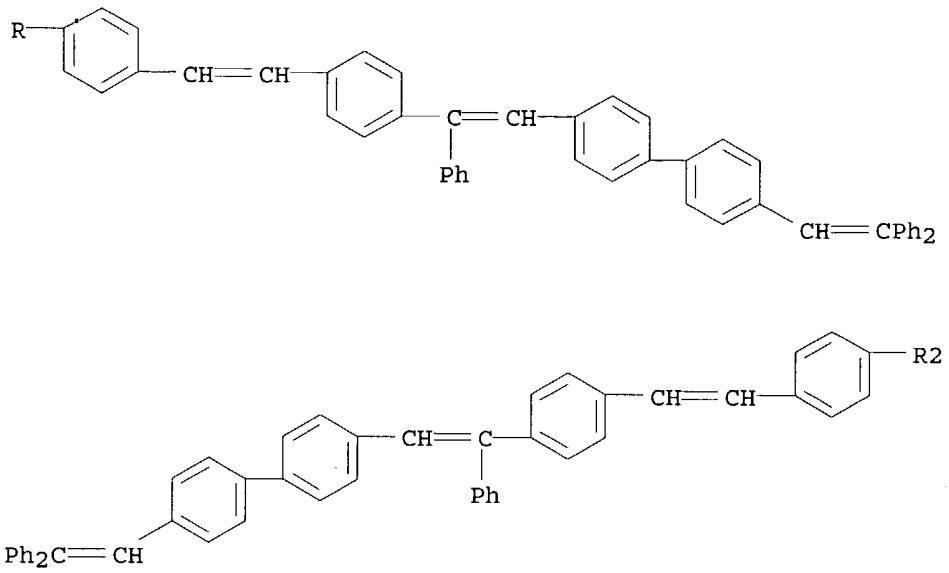
PAGE 1-A



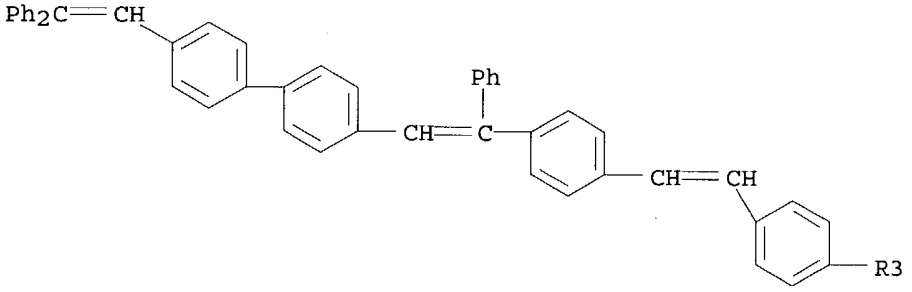
PAGE 1-B

CH═CPh2

PAGE 2-A

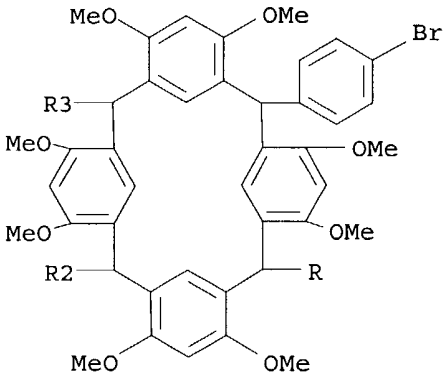


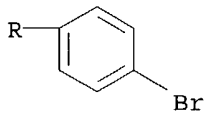
PAGE 3-A



546631-70-3 546632-68-2 546632-71-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(light-emitting calixarene or calixresorcinarene compns. for electroluminescent devices)
546631-70-3 CAPLUS
Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene, 2,8,14,20-tetrakis(4-bromophenyl)-4,6,10,12,16,18,22,24-octamethoxy- (9CI) (CA INDEX NAME)

PAGE 1-A





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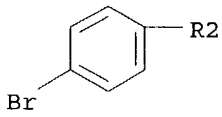
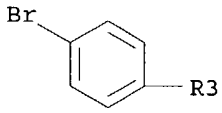
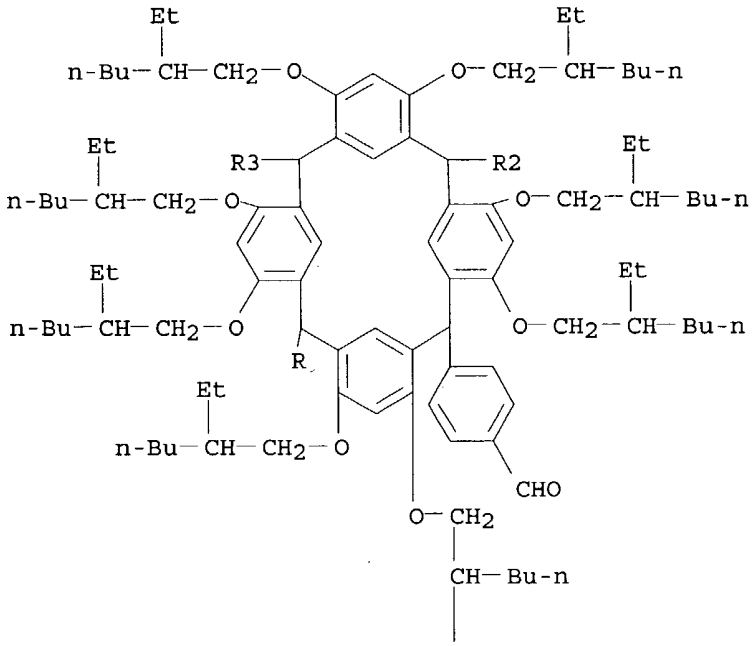




N 546632-68-2 CAPLUS
N Benzaldehyde, 4,4',4'',4'''-[4,6,10,12,16,18,22,24-octakis[(2-ethylhexyl)oxy]pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-2,8,14,20-tetrayl]tetrakis- (9CI) (CA INDEX NAME)

PAGE 1-A



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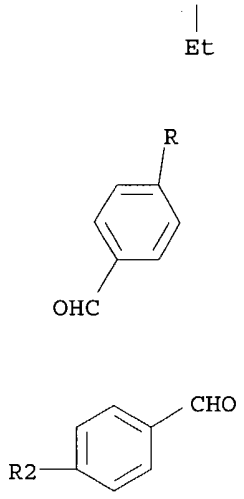

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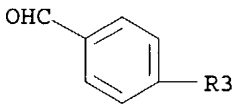
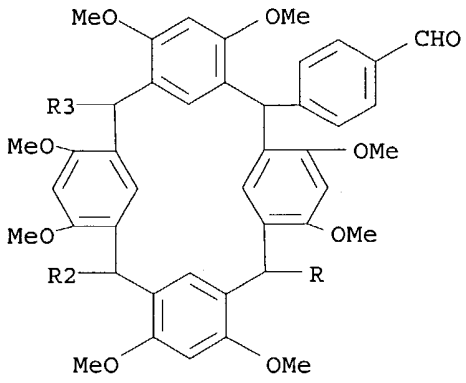
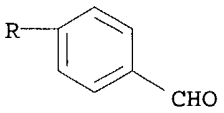


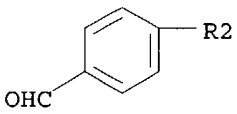
546632-71-7 CAPLUS
Benzaldehyde, 4,4',4'',4'''-(4,6,10,12,16,18,22,24-octamethoxypentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-2,8,14,20-tetrayl)tetrakis- (9CI) (CA INDEX NAME)

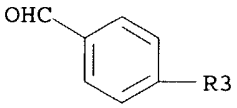
PAGE 1-A





PAGE 2-A





ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
CESSION NUMBER: 2003:300651 CAPLUS
CUMENT NUMBER: 138:326558
TLE: Preparation of hexameric calixarene-type complexes and their use for encapsulation of pharmaceutically active agents
VENTOR(S): Atwood, Jerry L.
TENT ASSIGNEE(S): USA
URCE: U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
CUMENT TYPE: Patent
NGUAGE: English
MILY ACC. NUM. COUNT: 1
TENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003073872	A1	20030417	US 2001-978925	20011016
WO 2003033649	A2	20030424	WO 2002-US30460	20020925
WO 2003033649	A3	20030703		

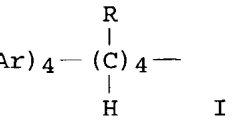
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,

CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

RIORITY APPLN. INFO.: US 2001-978925 A 20011016

THER SOURCE(S): MARPAT 138:326558

I



B The invention relates to a composition I [wherein Ar = trihydroxybenzene radical; R = (alkyl)aryl group containing 6-20 C atoms, an aliphatic group containing 2-20 C atoms, or a substituted aliphatic or (alkyl)aryl group having a substituent of carbonyl, carboxyl, amide, halide, ester, or hydroxyl group], comprising a highly stable guest/host assembly having a spheroidal host assembly comprised of a hexamer of a methylene-bridged trihydroxybenzene tetramer and a guest component encapsulated within the spheroidal host assembly. The invention also relates to a guest component, specifically a pharmaceutically active agent, that is encapsulated within the spheroidal host assembly and is stable upon a solubilization in a 1:1 mixture of acetone and H2O for one day at 37°. The pharmaceutically active agent encapsulated within the spheroidal hexamer may be Depakote, Wellbutrin, Allegra, Neurontin, Zovirax, or Claritin. Another aspect of the invention provides for a process for the preparation of a hexameric complex from a methylene-bridged tetramer solubilized in an amphiphilic organic solvent. An activator, comprising an organic compound of a lower mol. weight than that of the tetramer which is functionalized with at least one of an acidic group, **halogen**, amino group, amido group, ester group, or hydroxy group, is incorporated into the amphiphilic solvent containing the tetramer. The tetramer may be prepared from an aldehyde and pyrogallol which are reacted under conditions to produce a condensation product of the methylene-bridged cyclic tetramer. For example, stepwise addition of concentrated HCl and propionaldehyde to a solution of pyrogallol in 95% EtOH, followed by stirring for 12 h afforded I (R = Et).

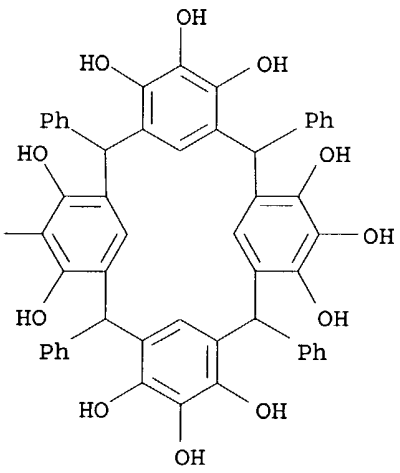
T **512785-41-0P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(hexameric capsule; preparation of hexameric calixarene-type complexes and their use for encapsulation of pharmaceutically active agents)

N 512785-41-0 CAPLUS

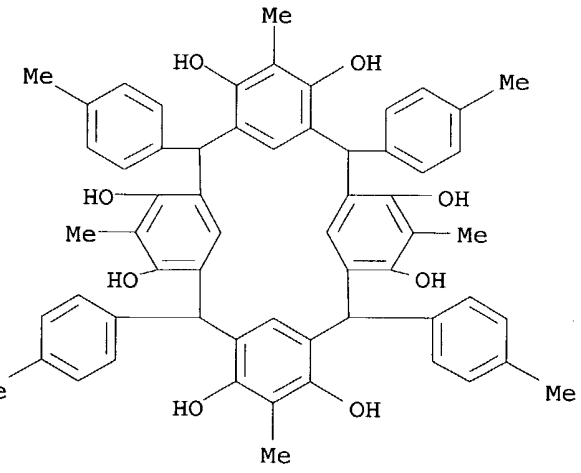
N Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,5,6,10,11,12,16,17,18,22,23,24-dodecol, 2,8,14,20-tetraphenyl- (9CI) (CA INDEX NAME)



7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
CCESSION NUMBER: 1995:828347 CAPLUS
OCUMENT NUMBER: 123:241910
ITLE: Friction charge-providing member for positively-chargeable toner.
NVENTOR(S): Mukudai, Osamu; Matsuura, Yuuji; Niimura, Isao; Watanabe, Kayoko; Iwasa, Keiko
ATENT ASSIGNEE(S): Hodogaya Chemical Co., Ltd., Japan
OURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
OCUMENT TYPE: Patent
ANGUAGE: English
AMILY ACC. NUM. COUNT: 1
ATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 655658	A2	19950531	EP 1994-105509	19940408
EP 655658	A3	19960703		
R: DE, FR, GB				
JP 07128916	A2	19950519	JP 1993-293798	19931101
JP 08262871	A2	19961011	JP 1994-93926	19940408

RIORITY APPLN. INFO.: JP 1993-293798 19931101
THER SOURCE(S): MARPAT 123:241910
I For diagram(s), see printed CA Issue.
B A friction charge-providing member for pos.-chargeable toner comprises a parent material and a charge-controlling agent on the surface selected from I and II [A and B = H, **halogen**, alkoxyl, carboxyl, hydroxyl, ester, nitro, amino, alkylamino, alkyl which may contain a substituent(s) or a Ph group which may contain a substituent(s); R = H, alkyl or Ph or naphthyl group which may contain a substituent(s); m = an integer 2 to 16; and n = an integer 4 to 8]. The toner provides improved charging stability.
T **168405-65-0**
RL: TEM (Technical or engineered material use); USES (Uses)
(charge-controlling agent for electrostatog. toner)
N 168405-65-0 CAPLUS
N Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 5,11,17,23-tetramethyl-2,8,14,20-tetrakis(4-methylphenyl)- (9CI) (CA INDEX NAME)

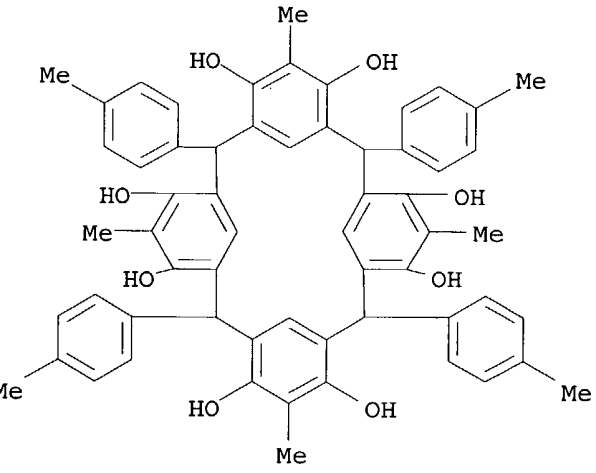


7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
CCESSION NUMBER: 1995:794919 CAPLUS
OCUMENT NUMBER: 123:325712
TLE: Electrostatic image developing toner.
NVENTOR(S): Mukudai, Osamu; Matsuura, Yuuji; Niimura, Isao;

Watanabe, Kayoko; Isawa, Keito
PATENT ASSIGNEE(S): Hodogaya Chemical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 22 pp
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 651294	A1	19950503	EP 1994-105508	19940408
EP 651294	B1	19980708		
R: DE, FR, GB				
JP 07175269	A2	19950714	JP 1994-93927	19940408
US 5679489	A	19971021	US 1996-620150	19960322
PRIORITY APPLN. INFO.:			JP 1993-293799	19931101
			US 1994-224523	19940407

OTHER SOURCE(S): MARPAT 123:325712
GI For diagram(s), see printed CA Issue.
AB An electrophotog. toner free of metal such as Cr comprises ≥1 charge-controlling agent selected from I and II [A, B = H, **halogen**, alkoxy carboxyl, OH, ester, nitro, amino, alkylamino, alkyl, Ph; R = H, alkyl, Ph, naphthyl; m = 2-16; n = 4-8]. The toner shows no deterioration during preparation, excellent stability, excellent dispersibility in binder resin, and excellent friction chargeability.
IT **168405-65-0**
RL: MOA (Modifier or additive use); USES (Uses)
(charge-controlling agent for electrophotog. toners)
RN 168405-65-0 CAPLUS
CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 5,11,17,23-tetramethyl-2,8,14,20-tetrakis(4-methylphenyl)- (9CI) (CA INDEX NAME)



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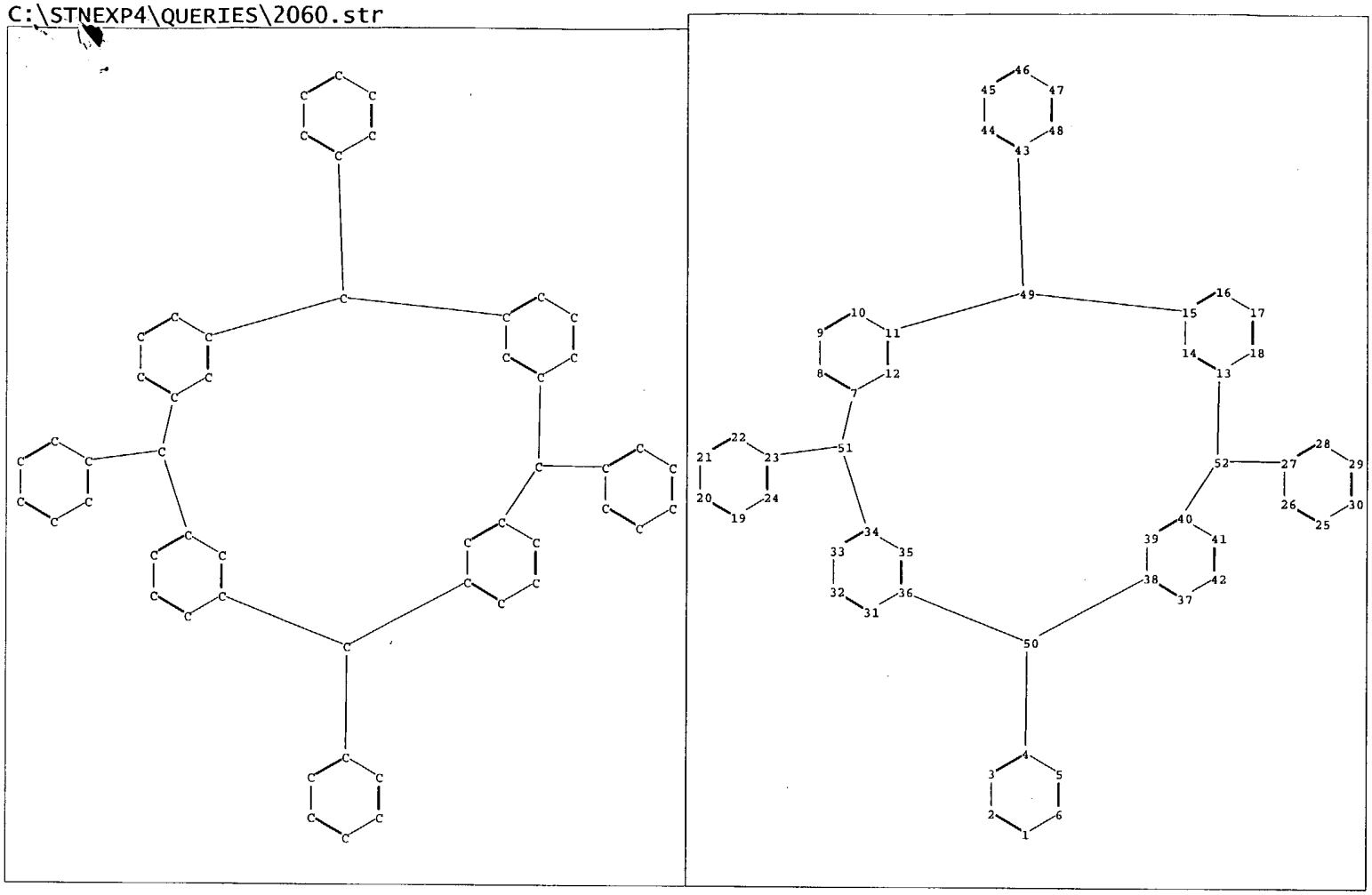

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52
chain bonds :
4-50 23-51 27-52 43-49
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 7-51 8-9 9-10 10-11 11-12 11-49 13-14 13-18
13-52 14-15 15-16 15-49 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26
25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 34-51 35-36 36-50
37-38 37-42 38-39 38-50 39-40 40-41 40-52 41-42 43-44 43-48 44-45 45-46 46-47
47-48
exact/norm bonds :
7-51 11-49 13-52 15-49 34-51 36-50 38-50 40-52
exact bonds :
4-50 23-51 27-52 43-49
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15
15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28
28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36 37-38 37-42 38-39 39-40 40-41
41-42 43-44 43-48 44-45 45-46 46-47 47-48

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
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42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:Atom 49:Atom 50:Atom 51:Atom
52:Atom

SAMPLE SEARCH INITIATED 11:50:44 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1336 TO ITERATE

74.9% PROCESSED 1000 ITERATIONS 13 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 24528 TO 28912
PROJECTED ANSWERS: 97 TO 597

L2 13 SEA SSS SAM L1

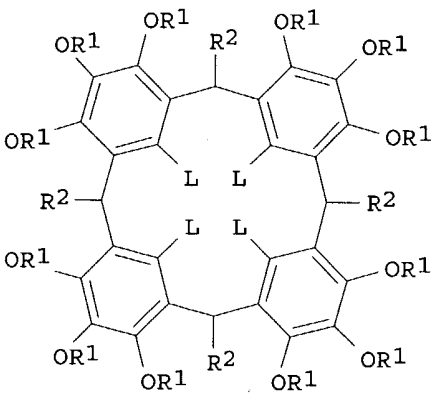
L3 12 L2

=> d 1-12 ibib abs hitstr

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:947709 CAPLUS
DOCUMENT NUMBER: 140:16573
TITLE: Preparation of calixarene-derivatives having anti-viral activity
INVENTOR(S): Coveney, Donal; Costello, Benjamin
PATENT ASSIGNEE(S): Aids Care Pharma, Limited, Ire.
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1367044	A1	20031203	EP 2003-76538	20030521

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRIORITY APPLN. INFO.: EP 2003-76538 20030521
OTHER SOURCE(S): CASREACT 140:16573; MARPAT 140:16573
GI



I

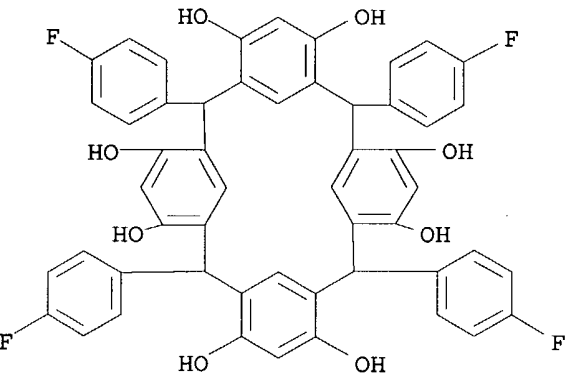
AB The patent relates to the preparation of compds. I wherein at least one R1 = H and the remainder = CH2CO2K; R2 = 4-fluorophenyl; and L = H. The compds.

are useful as pharmaceutical compns. in the treatment of AIDS. Thus, a pyrogallol calixarene derivative prepared by reacting pyrogallol and p-fluorobenzaldehyde to form pyrogallol calixarene; treated with potassium carbonate and Et bromoacetate; and followed by hydrolysis gave EC50 of 1.25 μM compared to 0.5-1.0 for the control (AC-1) in HIV-1 antiviral assay.

IT **629614-96-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of calixarene-derivs. having anti-viral activity)

RN 629614-96-6 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 2,8,14,20-tetrakis(4-fluorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:913398 CAPLUS

DOCUMENT NUMBER: 137:278960

TITLE: Solvent-free synthesis of calix[4]resorcinarenes

AUTHOR(S): Roberts, Brett A.; Cave, Gareth W. V.; Raston, Colin L.; Scott, Janet L.

CORPORATE SOURCE: Centre for Green Chemistry, Monash University, 3800, Australia

SOURCE: Green Chemistry (2001), 3(6), 280-284
CODEN: GRCHFJ; ISSN: 1463-9262

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

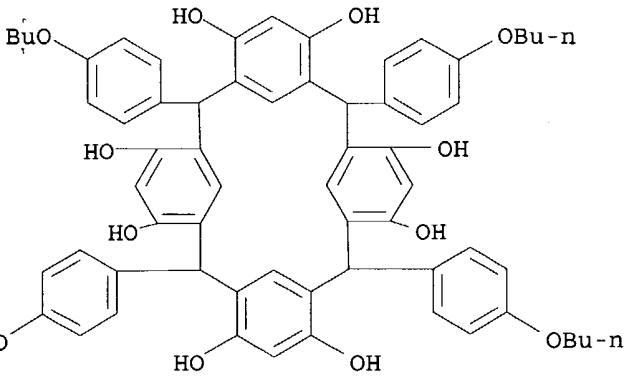
OTHER SOURCE(S): CASREACT 137:278960

AB Calix[4]resorcinarenes may be prepared in high yield and purity by direct reaction of resorcinol and benzaldehyde derivs. in the presence of a catalytic amount of solid acid and at ambient temperature under solvent-free conditions. This represents a viable alternative to traditional solution phase methodol. The solvent-free method measures up well with respect to energy usage, solvent wastes and associated hazards, reaction time and yield. In addition, the relevant benzaldehyde derivs. are prepared in polypropylene glycol, which is readily recycled.

IT **464885-60-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of calix[4]resorcinarenes via cyclocondensation of arylaldehydes with resorcinol under solvent-free conditions)

RN 464885-60-7 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 2,8,14,20-tetrakis(4-butoxyphenyl)- (9CI) (CA INDEX NAME)



RENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

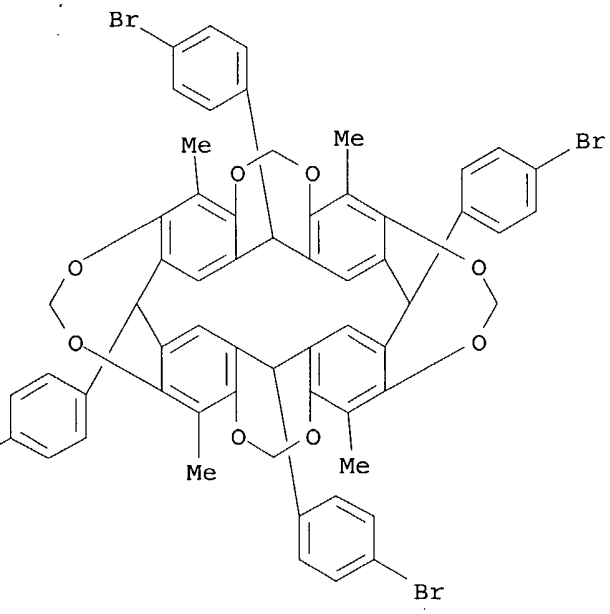
ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
SSION NUMBER: 2001:765663 CAPLUS
MENT NUMBER: 136:69555
E: A vibrational spectroscopic study of clathrates of resorcarene-based cavitands
OR(S): Dormann, Jorg; Ruoff, Andreas; Schatz, Jurgen; Middel, Oskar; Verboom, Willem; Reinhoudt, David N.
ORATE SOURCE: Section of Vibrational Spectroscopy, University of Ulm, Ulm, D-89069, Germany
CE: Journal of Physical Organic Chemistry (2001), 14(10), 704-708
CODEN: JPOCEE; ISSN: 0894-3230
ISHER: John Wiley & Sons Ltd.
MENT TYPE: Journal
UAGE: English

By comparison of the fully assigned vibrational spectra obtained for resorcarene-based cavitands, their clathrates with toluene and ethanol resp., and free guest mols., good structural models for the clathrates could be obtained merely based on Fourier transform IR data. Using this technique, various different interactions between the host and guest in the solid state as well as the orientation of the included guest could be identified. In the case of one cavitand, the model obtained by this methodol. could be validated by comparison with an exptl. crystal structure anal.

384379-14-0
RL: PRP (Properties)
(IR study on clathrates of resorcarene-based cavitands)
384379-14-0 CAPLUS
2,20:3,19-Dimetheno-1H,21H,23H,25H-bis[1,3]dioxocino[5,4-i:5',4'-i']benzo[1,2-d:5,4-d']bis[1,3]benzodioxocin, 1,21,23,25-tetrakis(4-bromophenyl)-7,11,15,28-tetramethyl-, stereoisomer, compd. with methylbenzene (1:4) (9CI) (CA INDEX NAME)

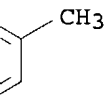
CM 1

CRN 216760-27-9
CMF C60 H44 Br4 O8



CM 2

CRN 108-88-3
CMF C7 H8



ERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ESSION NUMBER: 2001:656593 CAPLUS
UMENT NUMBER: 135:371514
LE: Novel resorcin[4]arenes as potassium-selective ion-channel and transporter mimics
HOR(S): Wright, Angela J.; Matthews, Susan E.; Fischer, Wolfgang B.; Beer, Paul D.
PORATE SOURCE: Department of Chemistry, Inorganic Chemistry Laboratory, University of Oxford, Oxford, OX1 3QR, UK
RCE: Chemistry--A European Journal (2001), 7(16), 3474-3481 CODEN: CEUJED; ISSN: 0947-6539
LISHER: Wiley-VCH Verlag GmbH
UMENT TYPE: Journal
GUAGE: English

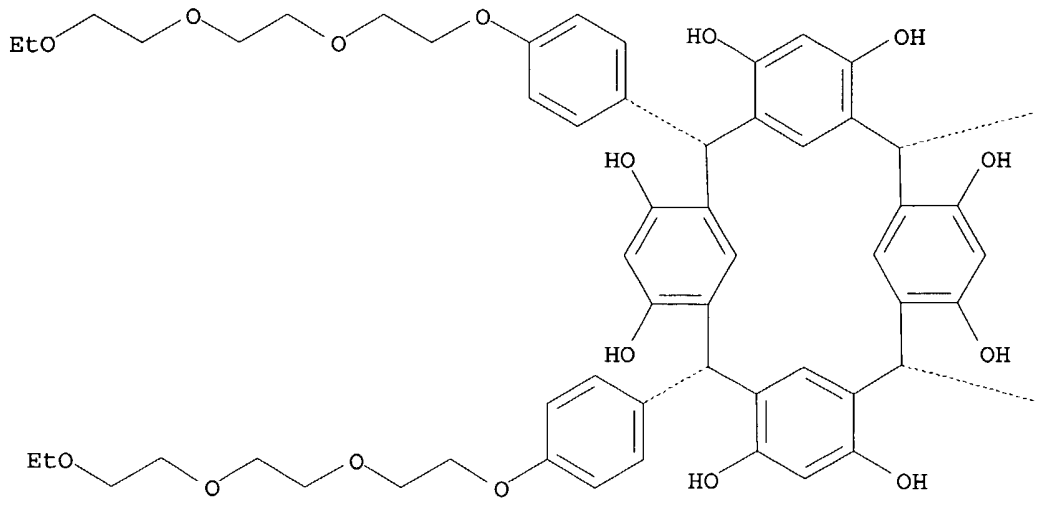
A series of novel resorcin[4]arenes with extended π systems have been synthesized and developed as potassium-selective transporters. Resorcin[4]arenes that feature crown ether moieties function as efficient carriers of K+ across bulk liquid membranes showing enhanced selectivity over the other alkali metal ions relative to a model system (benzo[15]crown-5). Incorporation of functionalities suitable for pore formation, in addition to an extra annulus of aromatic residues, gives mols. which have remarkable ion-channel-mimicking behavior in a biol. lipid bilayer with outstanding K+/Na+ selectivity.

374106-11-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of resorcin[4]arenes and activity as potassium-selective ion-channel and transporter mimics)
374106-11-3 CAPLUS
Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1

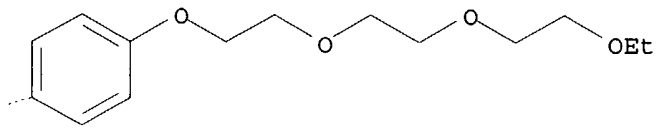
5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,
2,8,14,20-tetrakis[4-[2-[2-(2-ethoxyethoxy)ethoxy]ethoxy]phenyl]-,
stereoisomer (9CI) (CA INDEX NAME)

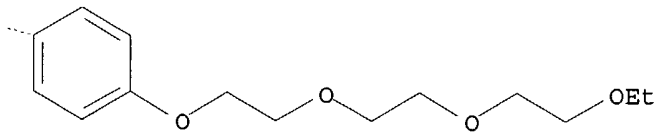
Relative stereochemistry.

PAGE 1-A



PAGE 1-B





REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:513131 CAPLUS
DOCUMENT NUMBER: 131:293195
TITLE: Novel dissolution inhibitors based on calixarene derivatives for use in chemical amplification resists
AUTHOR(S): Ito, Hiroshi; Nakayama, Tomonari; Ueda, Mitsuru; Sherwood, Mark; Miller, Dolores
CORPORATE SOURCE: IBM Almaden Research Center, San Jose, CA, 95120, USA
SOURCE: Polymeric Materials Science and Engineering (1999), 81, 51-52
CODEN: PMSEDG; ISSN: 0743-0515
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Calix[4]resorcinarenes were synthesized by condensing resorcinol with aldehydes (acetaldehyde, benzaldehyde, and 4-isopropylbenzaldehyde) and separated into C4v and C2v, isomers. All eight OH groups were protected with acid-labile groups such as tBOC and tBuOCOCH2. The protected calixarenes have been found to be excellent dissoln. inhibitors for use in chemical amplification resists.

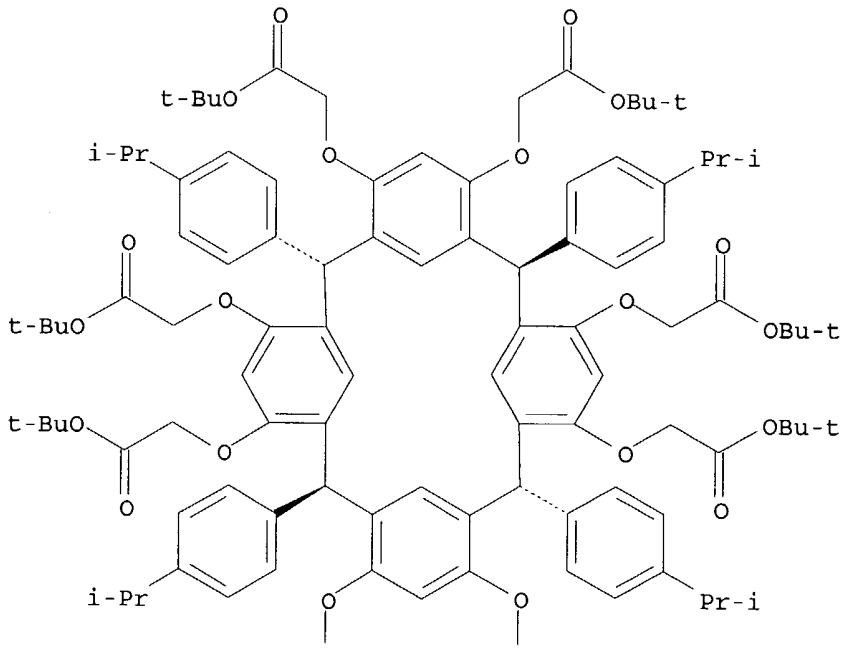
IT **246023-06-3P**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(novel dissoln. inhibitors based on calix[4]resorcinarenes for use in chemical amplification resists)

RN 246023-06-3 CAPLUS

CN Acetic acid, 2,2',2'',2''',2'''',2''''',2'''''',2'''''''-[[2,8,14,20-tetrakis[4-(1-methylethyl)phenyl]pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octayl]octakis(oxy)]octakis-, octakis(1,1-dimethylethyl) ester, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 2-A

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

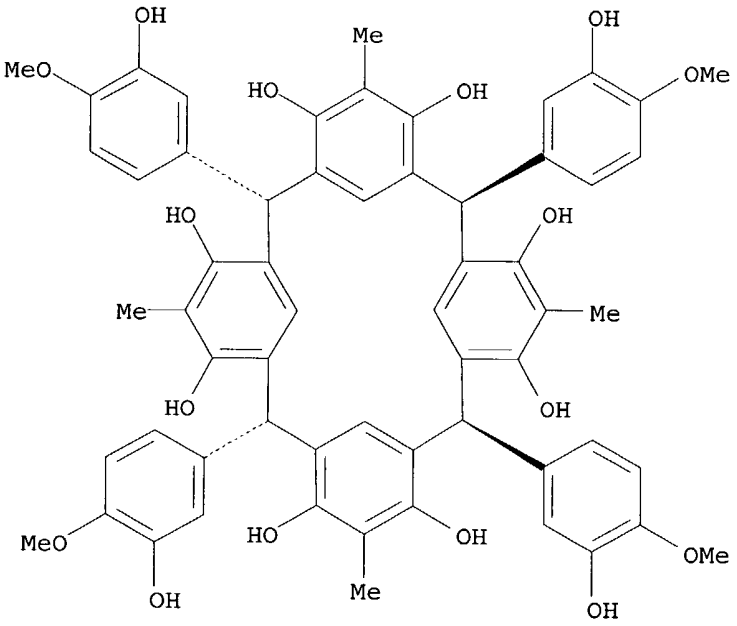
L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:478017 CAPLUS
DOCUMENT NUMBER: 131:148528
TITLE: Application of water soluble resorcinarenes in nanofiltration-complexation with cesium and strontium as targets
AUTHOR(S): Nicod, Laurence; Chitry, Frederic; Gaubert, Eric; Lemaire, Marc; Barnier, Henri

CORPORATE SOURCE: Institut de Recherches sur la Catalyse, Laboratoire de Catalyse et Synthese Organique, Universite Claude Bernard, Villeurbanne, 69622, Fr.
SOURCE: Journal of Inclusion Phenomena and Macrocyclic Chemistry (1999), 34(2), 141-151
CODEN: JIPCF5
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Combined nanofiltration-complexation is applied to the separation of Cs and Sr from a solution containing a large concentration of Na. Cs and Sr complexation was studied using various water soluble resorcinarene-type ligands. Combined with nanofiltration these ligands improved the separation of Cs and Sr from Na by the Filmtec NF 70 membrane.

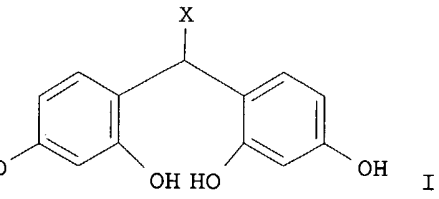
IT **235094-96-9**
RL: NUU (Other use, unclassified); USES (Uses)
(application of water soluble resorcinarenes in nanofiltration-complexation with cesium and strontium as targets)
RN 235094-96-9 CAPLUS
CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 2,8,14,20-tetrakis(3-hydroxy-4-methoxyphenyl)-5,11,17,23-tetramethyl-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:768661 CAPLUS
DOCUMENT NUMBER: 130:153434
TITLE: Rational Synthesis of Resorcarenes with Alternating Substituents at Their Bridging Methine Carbons
AUTHOR(S): Rumboldt, Giovanna; Boehmer, Volker; Botta, Bruno; Paulus, Erich F.
CORPORATE SOURCE: Dipartimento di Studi di Chimica e Tecnologia delle Sostanze Biologicamente Attive, Universita La Sapienza, Rome, 00185, Italy
SOURCE: Journal of Organic Chemistry (1998), 63(26), 9618-9619
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:153434



I

Resorcarenes bearing different aldehyde residues in alternating order were prepared by condensation of resorcinol-derived dimers I (X = CH2CH2Ph, C6H4NO2-4) with 4-hydroxybenzaldehyde or propanal. Stereoisomers were obtained by chromatog. or by acetylation with subsequent chromatog.

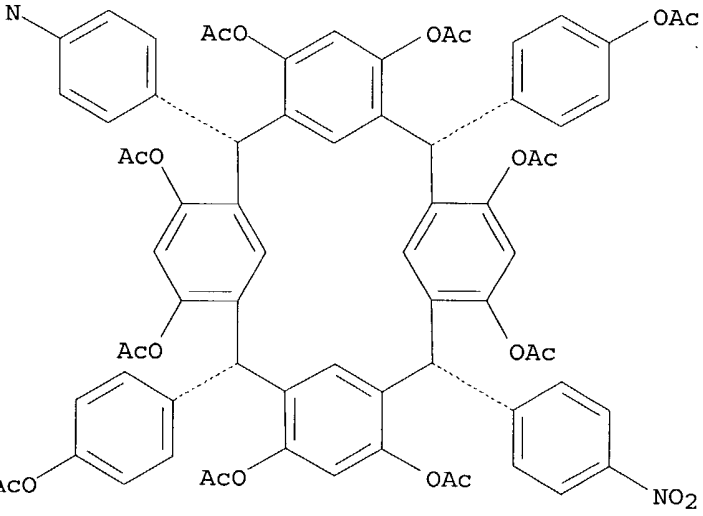
220213-30-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of resorcarenes with alternating substituents at methine bridges)

220213-30-9 CAPLUS

Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 2,14-bis[4-(acetyloxy)phenyl]-8,20-bis(4-nitrophenyl)-, octaacetate (ester), stereoisomer (9CI) (CA INDEX NAME)

elative stereochemistry.



FERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

CESSION NUMBER: 1998:664722 CAPLUS
CUMENT NUMBER: 130:25128
TLE: Phosphacavitands: I. Phosphorylation of calix[4]resorcinolarenes with phosphorous amides. Synthesis of first cavitands derived from phosphoramidites
THOR(S): Maslennikova, V. I.; Shkarina, E. V.; Vasyanina, L. K.; Lysenko, K. A.; Antipin, M. Yu.; Nifant'ev, E. E.
RPORATE SOURCE: Moscow State Pedagogical University, Moscow, Russia
URCE: Russian Journal of General Chemistry (Translation of Zhurnal Obshchei Khimii) (1998), 68(3), 350-360
CODEN: RJGCEK; ISSN: 1070-3632
BLISHER: MAIK Nauka/Interperiodica Publishing
CUMENT TYPE: Journal
NGUAGE: English

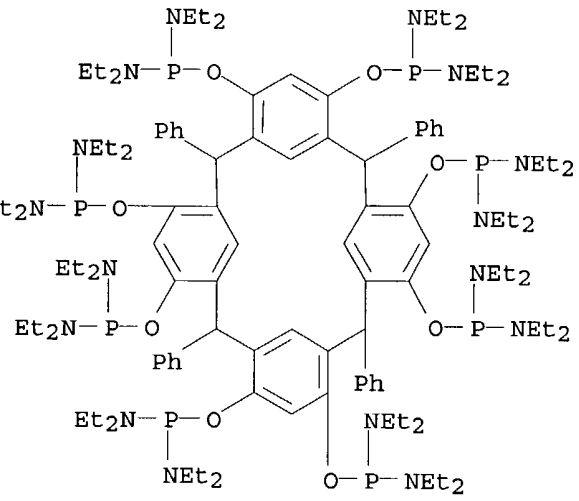
Phosphorylation of calix[4]resorcinolarenes with phosphorous mono-, di-

and triamides was studied. Factors controlling the reaction pathways and the selectivity of the formation of cavitands with phosphite and phosphoramidite moieties and calix[4]resorcinolarenes with eight phosphite or phosphoramidite moieties were revealed.

T **216078-73-8**
RL: FMU (Formation, unclassified); RCT (Reactant); FORM (Formation, nonpreparative); RACT (Reactant or reagent)
(preparation of cavitands derived from phosphoramidites)

N 216078-73-8 CAPLUS

N Phosphorodiamidous acid, tetraethyl-, 2,8,14,20-tetraphenylpentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octayl ester (9CI) (CA INDEX NAME)

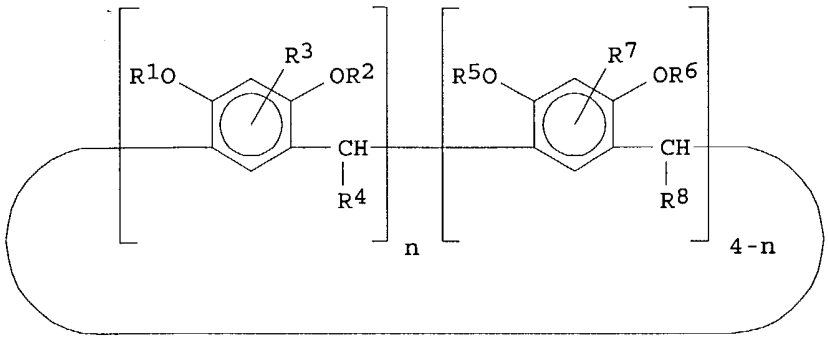


EFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

3 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
CCESSION NUMBER: 1998:394118 CAPLUS
OCUMENT NUMBER: 129:128942
ITLE: Toner for electrostatic latent image development
NVENTOR(S): Ueda, Hideaki; Furukawa, Keiichi
ATENT ASSIGNEE(S): Minolta Camera Co., Ltd., Peop. Rep. China
OURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
OCUMENT TYPE: Patent
ANGUAGE: Japanese
AMILY ACC. NUM. COUNT: 1
ATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10161349	A2	19980619	JP 1996-316063	19961127

RIORITY APPLN. INFO.: JP 1996-316063 19961127
I



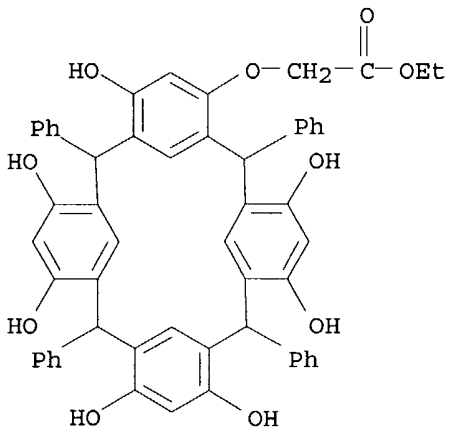
I

AB The title toner contains a resorcinol arene derivative I (R1, R2, R5, R6 = H, C1-5 alkyl, (CH2)mCO2R9; R9 = H, lower alkyl; m= 1-3; R1, R2, R5, and R6 cannot be H in the same time; R3, R7 = H, halo, alkoxy, carboxylnitro, alkyl, hydroxy; R4, R8 = alkyl, aryl, heterocyclyl; n = 1-4) as a charge controlling agent. The toner shows superior charge stability, resistance to heat and solvent, color reproducibility and transparency.

IT **210303-17-6**
RL: TEM (Technical or engineered material use); USES (Uses)
(charge controlling agent for electrostatog. toner)

RN 210303-17-6 CAPLUS

CN Acetic acid, [(6,10,12,16,18,22,24-heptahydroxy-2,8,14,20-tetraphenylpentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaen-4-yl)oxy]-, ethyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:257156 CAPLUS

DOCUMENT NUMBER: 124:342828

TITLE: Designing of resorcinol-p-hydroxybenzaldehyde tetramer for uranophilic activity

AUTHOR(S): Singh, Harmit; Singh, Serjinder

CORPORATE SOURCE: Dep. Chem., Guru Nanak Dev Univ., Amritsar, 143 005, India

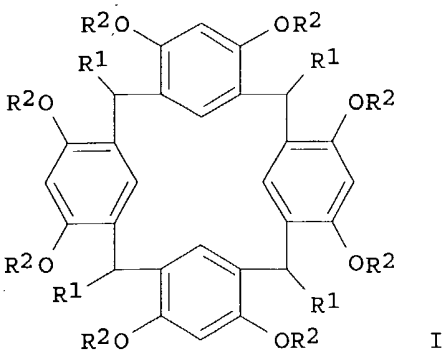
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1996), 35B(5), 409-12
CODEN: IJSBDB; ISSN: 0376-4699

PUBLISHER: Publications & Information Directorate, CSIR

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



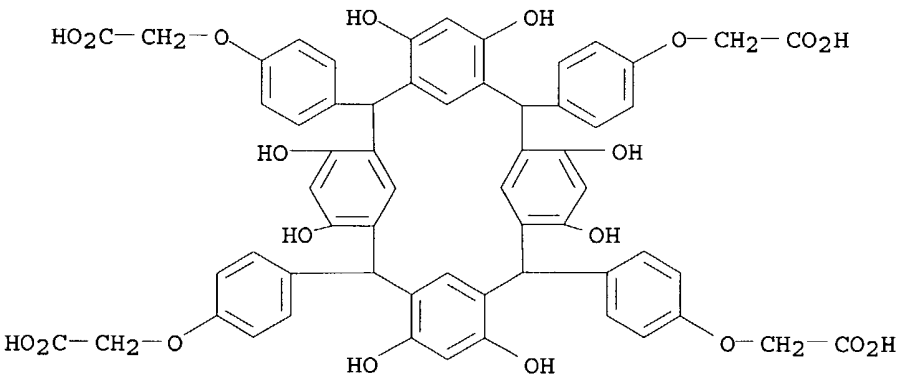
I

AB Resorcinol-p-hydroxybenzaldehyde tetramer Ia (R1 = p-C6H4OH, R2 = H) has been obtained under acidic conditions, separated into its conformations, and characterized by 1H NMR and 13C NMR spectra and by the preparation of its octaacetate (Ib; R1 = p-C6H4OAc, R2 = H). The direct carboxymethylation of Ia has been attempted with chloroacetic acid under basic conditions, but due to steric repulsions, tetramer Ic (R1 = p-C6H4OCH2CO2H, R2 = H) could not be obtained. By use of the reverse approach, p-hydroxybenzaldehyde is carboxymethylated first to yield HO2CCH2O-p-C6H4CHO which is then cyclized under acidic conditions to yield the tetramer Id (R1 = p-C6H4OCH2CO2Et, R2 = H). The coplanar arrangement of carboxylate groups in Ic is utilized to bind uranyl ion. The binding, as shown by a Job's plot, does not show a 1:1 Ic:UO22+ ratio due to the fourth carboxylate group, but it acts as a good uranophile as indicated by an increase in the UV absorption intensity of UO22+ ions in the presence of Ie (R1 = p-C6H4OCH2CO2Et, R2 = COCH3).

IT **176798-35-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and uranophilic activity of resorcinol-hydroxybenzaldehyde tetramer)

RN 176798-35-9 CAPLUS

CN Acetic acid, 2,2',2'',2'''-[(4,6,10,12,16,18,22,24-octahydroxypentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-2,8,14,20-tetrayl)tetrakis(4,1-phenyleneoxy)]tetrakis- (9CI) (CA INDEX NAME)



L3 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:994163 CAPLUS
DOCUMENT NUMBER: 124:55584
TITLE: Preparation of calixarene-based compounds having antibacterial, antifungal, anticancer, and anti-HIV activity
INVENTOR(S): Harris, Stephen J.
PATENT ASSIGNEE(S): Ire.
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2

ÖCUMENT TYPE: Patent
ANGUAGE: English
AMILY ACC. NUM. COUNT: 1
ATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9519974	A2	19950727	WO 1995-IE8	19950124
WO 9519974	A3	19950921		
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, FI, GB, HU, JP, KP, LU, NO, RO, UA, US				
RW: AT, BE, CH, DE, ES, FR, GB, GR, IE, LU, NL, SE, GA, ML, NE, SN, TD, TG				
AU 9515453	A1	19950808	AU 1995-15453	19950124
PRIORITY APPLN. INFO.:			IE 1994-57	19940124
			WO 1995-IE8	19950124

THER SOURCE(S): MARPAT 124:55584

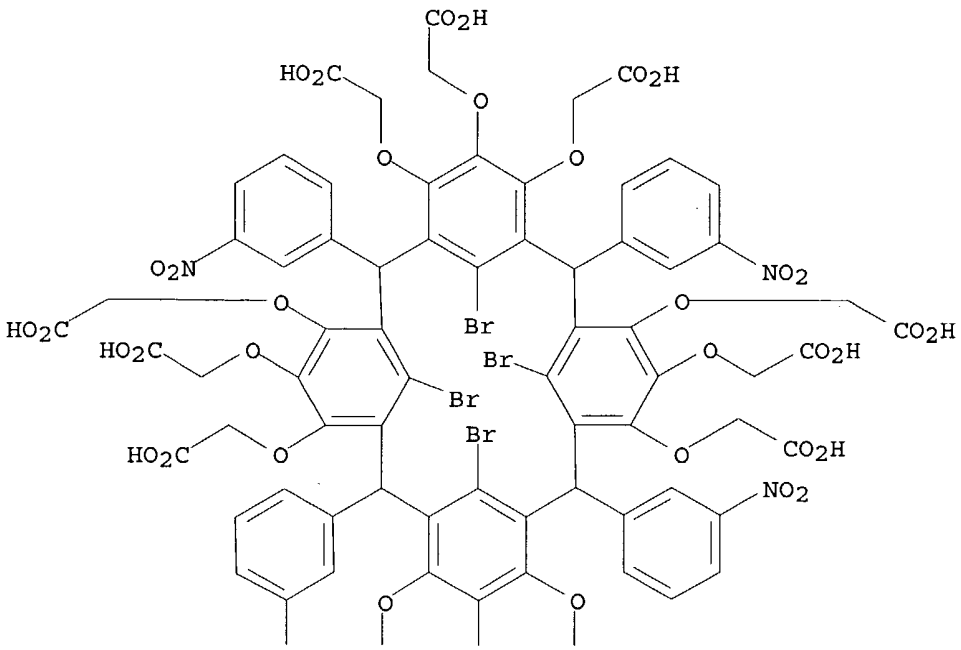
I For diagram(s), see printed CA Issue.

AB Calixarene-based compds., which are calixarenes or oxacalixarenes, acyclic phenyl-formaldehyde oligomers, cyclotriveratrylene derivs., cyclic tetrameric resorcinol-aldehyde derivs. known as Hogberg compds. and cyclic tetrameric pyrogallol-aldehyde derivs., are prepared For example, calixarenes or oxacalixarenes are represented by general formula [I; n + m = 3-8; m = 0-3; n = 0-8; R1 = H, halo, hydrocarbyl, aryl, (un)substituted hydrocarbylaryl, NO2, SO3M1; wherein M1 = alkali metal, SO3H; R1 = OR2; wherein R2 = CH2CO2R3, CH2CO2Mp/p, CH2CONR4R5; wherein R3 = (un)substituted alkyl; M = metal, ammonium ion; p = the charge on the metal ion; R4 or R5 may be the same or different, or both may be part of amino acid ester of poly(amino acid ester) or one or more of the same or different amino acids or part of a cyclic polyene antibiotic/antifungal drug or part of a cyclic nitrogen heterocycle; X = halo, NO2, CO2H, cyano, other electron withdrawing group]. Thus, n-butyraldehyde and pyrogallol in a 1:4 mixture of 37% aqueous HCl and EtOH was refluxed under N for 90 min to give a cyclic tetramer (II; R = X = H), which was brominated with Br in CHCl3 to II (R = H, X = Br) and etherified with Et bromoacetate in the presence of K2CO3 in refluxing acetone to give II (R = CH2CO2Et, X = Br). The latter compound was saponified with KOH in refluxing EtOH , acidified with aqueous HCl, and treated with 25% aqueous NH4OH to give II (R = CH2CO2-NH4+, X = Br). The latter compound in vitro inhibited the infection of C8166 cells with HIV-2, SIV (Simian immunodeficiency virus), and HIV-1 with EC50 of 10, 20, and 0.03 μM.

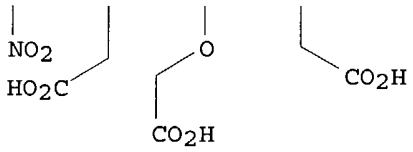
T **171799-65-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of calixarene-based compds. having antibacterial, antifungal, anticancer, and anti-HIV activity)

LN 171799-65-8 CAPLUS
N Acetic acid, 2,2',2'',2''',2'''',2''''',2'''''',2''''''',2'''''''',2''''''''',2'''''''''',2''''''''''-[[25,26,27,28-tetrabromo-2,8,14,20-tetrakis(3-nitrophenyl)pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,5,6,10,11,12,16,17,18,22,23,24-dodecayl]dodecakis(oxy)]dodecakis-, dodecapotassium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



●12 K

ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

CESSION NUMBER: 1995:298047 CAPLUS
CUMENT NUMBER: 123:169331
TLE: Macrocyclic π-Conjugated Carbopolyanions and Polyradicals Based upon Calix[4]arene and Calix[3]arene Rings
THOR(S): Rajca, Andrzej; Rajca, Suchada; Desai, Shailesh R.
RPORATE SOURCE: Department of Chemistry, University of Nebraska, Lincoln, NE, 68588-0304, USA
URCE: Journal of the American Chemical Society (1995), 117(2), 806-16
CODEN: JACSAT; ISSN: 0002-7863
BLISHER: American Chemical Society
CUMENT TYPE: Journal
NGUAGE: English

STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Calix[4]arene- and calix[3]arene-based polyether precursors to polyradicals are synthesized. π-Conjugated carbanions, such as calix[4]arene-based tetraanion and calix[3]arene-based trianion, are prepared and studied using NMR spectroscopy and voltammetry. A 4-fold-sym.

conformer for the tetraanion and two non-interconverting conformers (3-fold- and 2-fold-sym.) for the trianion are found on the NMR time scale. Oxidation of the tetraanion gives the corresponding calix[4]arene-based S = 2 tetraradical. However, ESR spectroscopy suggests that the predominant product from oxidation of calix[3]arene-based trianion is the corresponding triradical dimer. The related calix[3]arene-based S = 1 diradical is found to be monomeric. Addnl. characterization of octaradical I and pentaradical II, which were described in a preliminary communication, is presented.

T **167014-10-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and characterization of macrocyclic conjugated carbopolyanions and polyradicals based on calixarene rings)

N 167014-10-0 CAPLUS

N Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene, 2,8,14,20-tetrakis[4-(1,1-dimethylethyl)phenyl]-2,8,14,20-tetramethoxy- (9CI) (CA INDEX NAME)